

Application Serial No.: 10/088,503  
Reply to Office Action dated November 3, 2006

REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-13 are presently active in this case, Claims 1-3 and 8 having been amended and Claims 9-13 having been added by way of the present Amendment. Care has been taken such that no new matter has been entered. (See, e.g., by way of illustration and not limitation, page 4, lines 14-23, page 12, line 27, through page 13, line 9, and features 22, 24, 32, 41, 43, and 51.)

In the outstanding Official Action, Claim 1 was rejected under 35 U.S.C. 103(a) as being unpatentable over Archambault (U.S. Patent No. 6,567,196) in view of Tomonaga et al. (U.S. Patent No. 5,878,025) and Kosaka (U.S. Patent No. 5,675,432). Claim 2 was rejected under 35 U.S.C. 103(a) as being unpatentable over Archambault in view of Tomonaga et al. and Bastien et al. (U.S. Patent No. 6,307,668). Claim 3 was rejected under 35 U.S.C. 103(a) as being unpatentable over Clark et al. (U.S. Patent No. 6,041,152) in view of Tomonaga et al. and Kosaka. Claims 4 and 8 were rejected under 35 U.S.C. 103(a) as being unpatentable over Archambault in view of Tomonaga et al. and Kosaka and further in view of Takeda et al. (U.S. Patent No. 6,091,538). Claim 5 was rejected under 35 U.S.C. 103(a) as being unpatentable over Clark et al. in view of Tomonaga et al. and Kosaka and further in view of Takeda et al. Claim 6 was rejected under 35 U.S.C. 103(a) as being unpatentable over Archambault in view of Tomonaga et al. and Kosaka and further in view of Yamamoto et al. (U.S. Patent No. 6,021,235). Claim 7 was rejected under 35 U.S.C. 103(a) as being

unpatentable over Clark et al. in view of Tomonaga et al. and Kosaka and further in view of Yamamoto et al. For the reasons discussed below, the Applicants request the withdrawal of the obviousness rejections.

The basic requirements for establishing a *prima facie* case of obviousness as set forth in MPEP 2143 include (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings, (2) there must be a reasonable expectation of success, and (3) the reference (or references when combined) must teach or suggest all of the claim limitations. The Applicants submit that a *prima facie* case of obviousness cannot be established in the present case because the cited references, either when taken singly or in combination, do not teach or even suggest all of the claim limitations.

Claims 1 and 3 each recite an optical wavelength division multiplexing and transmission apparatus comprising, among other features, a master rack and at least one slave rack, wherein the at least one slave rack is defined as accommodating an optical amplifier (the “second optical amplifier”) in which a second multiplexed signal output from a second optical wavelength multiplexer is multiplied. Similarly, Claim 2 recites an optical wavelength division multiplexing and transmission apparatus comprising, among other features, a master rack and at least one slave rack, wherein the at least one slave rack is defined as accommodating an optical amplifier (the “first optical amplifier”) in which a second multiplexed signal output from a synthetic optical wavelength demultiplexer is

multiplied. The Applicants submit that the cited references, either when taken singularly or in combination, fail to disclose or suggest the above limitations of independent Claims 1-3.

With regard to Claims 1 and 2, the Official Action acknowledges that the Archambault reference fails to disclose or suggest master rack and at least one slave rack (see pages 3 and 7 of the Official Action). Additionally, with regard to Claim 3, the Official Action acknowledges that the Clark reference fails to disclose or suggest master rack and at least one slave rack (see page 10 of the Official Action). Column 31, line 47, through column 32, line 4, of the Tomonaga et al. reference is cited for the teaching of such a feature.

The Applicants note that Claims 1-3 further define an optical amplifier being accommodated by the at least one slave rack, for example, Claims 1 and 3 define such an optical amplifier in which a second multiplexed signal output from a second optical wavelength multiplexer is multiplied and Claim 2 defines such an optical amplifier in which a second multiplexed signal output from a synthetic optical wavelength demultiplexer is multiplied. The Tomonaga et al. reference provides no teaching or even suggestion of the provision of an optical amplifier of any variety on the SRM units (11-13) described therein. In fact, the Tomonaga et al. reference makes no mention of the need for such optical amplifiers, or when it would be appropriate to place such amplifiers on the individual SRM units (11-13), the individual SRMs (1), the PSM unit (30), or the individual PSMs (3). No teaching is provided at all with respect to such amplifiers or their location.

Regardless of whether or not the other references cited against independent Claims 1-3, namely, the Archambault reference, the Clark reference, the Kosaka reference, and the

Bastien et al. reference, discuss the use of amplifiers, none of these references teach the use of a master rack and slave rack configuration. Thus, it would be hindsight speculation to presume that one of ordinary skill in the art would accommodate such optical amplifiers as defined in the claims on the slave rack in the manner recited, rather than on the master rack. The Tomonaga et al. reference does not disclose or suggest accommodating such optical amplifiers on a slave rack, and since the Archambault reference, the Clark reference, the Kosaka reference, and the Bastien et al. reference do not teach the use of a slave rack, then these references should not be presumed to teach the accommodation of such an optical amplifier on a slave rack.

The Applicants respectfully submits that a rejection based on the combinations discussed above would require the improper application of hindsight considerations. It is well settled that it is impermissible simply to engage in hindsight reconstruction of the claimed invention, using Applicant's structure as a template and selecting elements from the references to fill in the gaps. Recognizing, after the fact, that a modification of the prior art would provide an improvement or advantage, without suggestion thereof by the prior art, rather than dictating a conclusion of obviousness, is an indication of improper application of hindsight considerations. Simplicity and hindsight are not proper criteria for resolving obviousness.

The cited references do not disclose or suggest, either singly or in combination, the recited master rack and slave rack configuration defined in the independent claims of the present application. Thus, the Applicants respectfully request the withdrawal of the obviousness rejections of independent Claims 1-3.

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The dependent claims are considered allowable for the reasons advanced for independent claim from which they respectively depend. These claims are further considered allowable as they recite other features of the invention that are neither disclosed nor suggested by the applied references when those features are considered within the context of their respective independent claim.

Consequently, in view of the above discussion, it is respectfully submitted that the present application is in condition for formal allowance and an early and favorable reconsideration of this application is therefore requested.

Respectfully Submitted,

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